DOCUMENT RESUME

ED 203 920 JC 810 358

AUTHOR Kissler, Gerald R.; And Others
TITLE Factors Contributing to the Academic Difficulties Encountered by Students Who Transfer from Community Colleges to Four-Year Institutions.
PUB DATE Apr 81
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (Los Angeles, CA, April 13-17, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Academic Persistence; *College Transfer Students; *Community Colleges; Grade Point Average; Postsecondary Education; Research Problems; Student Attrition; Universities
IDENTIFIERS University of California Los Angeles

ABSTRACT

It is difficult to draw meaningful conclusions from existing studies of the academic performance of college transfer students because of the fact that the findings of one college are generally not applicable to another institution. However, the university concerned with the retention and achievement of its transfer students can use these studies to pinpoint areas that need to be a part of their own research efforts. This paper looks at three studies conducted at the University of California at Los Angeles and draws conclusions from these studies about the factors which influence transfer student success. First, the paper looks at the purposes of this composite investigation and then describes the subjects, procedures, and findings of the three studies. Next, the paper draws several conclusions about the factors which explain why the academic performance of community college transfer students is not equal to that of "native" freshmen who become juniors--a phenomenon identified in other research and verified by the first of the three studies considered. These conclusions are presented as they relate to differences in students, differences in the two-year colleges and the university, differences in competition and grading policies, differences in curriculum and pedagogy, and difficulties in the social integration of community college transfers. References and data tables are appended. (AYC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED203920

FACTORS CONTRIBUTING TO THE ACADEMIC DIFFICULTIES ENCOUNTERED BY STUDENTS WHO TRANSFER FROM COMMUNITY COLLEGES TO FOUR-YEAR INSTITUTIONS

Gerald R. Kissler
University of California, Los Angeles

Juan F. Lara
University of California, Los Angeles

Judith L. Cardinal
East Los Angeles College

Paper Presented to the

American Educational Research Association

April 1981

JC 810 358

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Gerald R. Kissler

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Factors Contributing to the Academic Difficulties Encountered by Students Who Transfer From Community Colleges to Four-Year Institutions

Over the years many studies have analyzed the academic performance of students who transfer from community colleges to four-year institutions. Twenty-five years ago Bird (1956) reported that studies at several colleges and universities had shown that although these students frequently had problems in adjustment in the first term after transferring, their academic performance was similar to "native" students who began as freshmen and persisted to the junior year at the four-year institution. The academic difficulty encountered in the first term after transferring is frequently manifest in a drop in the grade-point average, and has been labeled "transfer shock" in studies by Knoell and Medsker (Note 1) and Hills (1965). In a more recent review of the literature, however, Menke (Note 2) reported that about one-half of the studies he reviewed found that the academic performance of "native" students exceded that of community college transfers, and that about one-third found no significant difference between the two groups, with the rest showing that the academic performance of community college transfers exceeded that of "native" freshmen who became juniors.

Drawing meaningful conclusions from these studies is complicated by several methodological problems. First, the studies took place in different states during different periods of time and at different types of four-year institutions (i.e., public and private research universities and state colleges). Second, different criteria were used to measure academic success. Some studies looked at graduation and attrition rates, but most have used grade-

point averages as the criteria of academic success. However, the use of grade-point averages is confounded by the effects of grade inflation over time and differences in grading practices within and between institutions. Third, not all studies have controlled for the entering abilities of students. On the one hand, all transfer students, regardless of ability or choice of major, must compete for grades in upper division courses with "native" students who become juniors. On the other hand, admission requirements are never perfect and may not select only those transfer students who are able to compete equally.

These methodological problems would suggest that a four-year institution that is concerned about the admission and retention of community college transfers should carefully study several indicators of academic performance for a recent group of its transfer students. Therefore, the focus of the remainder of this paper will be on studies conducted at one university. Menke's (Note 2) study compared the academic performance of 1,768 community college transfers with 2,187 "native" students who had earned the baccalaureate from the University of California, Los Angeles (UCLA) between 1976 and 1978. Menke found that even when these samples were matched on SAT scores, "native" students had higher GPA's than the transfer students. That study probably would have found an even greater difference between "native" students and community college transfers if the GPA's for "native" students had been based only upon courses taken in the junior and senior years. Because the upper division GPA is higher than the lower division GPA for native students (Knoell and Medsker, Note 1), the overall GPA at the end of the senior year will be lower than the upper division GPA for "native" students. Also, by selecting only those who graduated, Menke lost information about students who dropped out.

One purpose of the present study was to provide a more complete description of the academic performance of several cohorts of entering transfer students. Another purpose was to determine the factors that contribute to differences in academic performance between "native" and transfer students. A wide variety of psychological, sociological and economic factors contribute to differences in the academic performance of college students. These factors interrelate in many ways, and may or may not result in dropping out before completing the baccalaureate. Tinto's (1975) model provides a useful theoretical framework for understanding the phenomenon of dropping out of college. Tinto argues that persistence is related to academic and social integration. "Given individual characteristics, prior experiences, and commitments, the model argues that it is the individual's integration into the academic and social systems of the college that most directly relates to his continuance in that college" (p. 97).

The extent to which community college courses articulate with the lower division programs at four-year institutions can contribute directly to the academic integration of transfer students. While formal articulation agreements are usually based upon the general subject matter of each course, there is no assurance that the level of text, the nature of student assignments or the standards for assigning grades are equivalent. Therefore, the present study was conducted to determine if differences in the quality of effort (Pace, Note 3) required by students contribute to different levels of academic performance.

Social integration is largely related to the interpersonal relationship one develops with other students. Commuting students who only come to campus for classes and then return to family and off-campus employment

responsibilities are less likely to persist (Astin, 1975; Chickering, 1974). An analysis of social networks (Barnes, 1954; Bott, 1957) should provide information about the extent of social integration of community college transfer students.

Experiment 1

Method

Subjects. The Ss were all students who became juniors at UCLA either by transferring from a California Community College (CCC) or one of the California State University and Colleges (CSUC), or by progressing from the lower division at one of the Univeristy of California (UC) campuses. The academic performance was analyzed separately for each of the entering cohorts in the Fall quarter of 1972, 1973, 1974, 1975 and 1976. The number of students in each of the cohorts is shown in Table 1. Transfer students who were eligible for admission to UC from high school but chose to attend a CCC or CSUC campus were required to have a GPA of 2.0. Transfer students who were not eligible for admission to UC upon graduation from high school were required to have completed 84 quarter units in courses acceptable to the University with a GPA of 2.4 and to have removed all but two of any high school subject matter deficiencies. Students admitted to the College of Fine Arts had to pass an additional screening by the faculty. Any transfer students admitted by special action or under the Increased Accommodation of Transfer Student (IATS) experiment were omitted from the study.

Procedure. Official student records from university files for each quarter from Fall 1972 through Fall 1979 were merged to produce a cumulative record for each student. The attrition rate was determined by divid-

ing the number of students who left UCLA without receiving the baccalaureate by the total number of students in the original cohort. A separate attrition rate was calculated for those who left in academic difficulty (i.e., were dismissed, had been on probation during any of the past three quarters, or had a cumulative GPA below 2.0).

Courses taken as freshmen and sophomores at UC, CSUC, or the CCC's were included in the lower division GPA. Upper division grade point averages included only courses taken in the junior and senior years. Those students whose cumulative GPA had fallen below 2.0 (on a 4 point scale) and those who were not making normal academic progress (i.e., completed less than 36 quarter units in the last three academic terms) were characterized as having been on probation.

Results

Table 1 contains the number of students and the attrition rates for entering cohorts from each segment of higher education. Attrition rates were highest for community college transfers and lowest for "native" UC students. Attrition rates varied for different cohorts but increased for community college transfers over the five year period for which data were collected.

INSERT TABLE 1 ABOUT HERE

The lower division grade point averages for the five cohorts combined were similar for all three groups of students (CCC = 3.02, CSUC = 3.02, UC = 2.98). However, the upper division GPA's differed by type of institution attended as a sophomore (CCC = 2.66, CSUC = 2.86, UC = 3.04). Table 2 compares the aca-

demic performance of CCC and CSUC transfers in 1976 with UC "native" freshmen who became juniors at UCLA. Within every lower division GPA interval, the academic performance of UC "native" students exceeded that of both groups of transfer students. The academic performance of "native" UC students with marginal lower division GPA's (2.0 to 2.4) was similar to that of CSUC transfers with GPA's between 2.4 and 2.8 and CCC transfers with lower division GPA's between 2.8 and 3.2.

Experiment 2

Method

Subjects. The Ss were 1,343 students who transferred to UCLA from a California Community College in the Fall of 1977.

Procedure. Each S was mailed a questionnaire that included four of the scales from Pace's (Note 3) Quality of Effort Survey: Library Experiences, Experiences in Writing, Course Learning and Experiences with Faculty. Each scale contained a series of activities designed to progressively measure higher level cognitive activities. The following three items are examples from the Course Learning Scale:

> Took detailed notes in class.
>
> Worked on a paper, project or assignment where you had to integrate ideas from various parts of the course.
>
> Tried to explain the material to another student or friend.

Ss were asked to rate on a four point scale (very often, often, occasionally or never) the frequency with which they engaged in each of these activities, as a community college student and as a UCLA student.

A total of 824 Ss returned the questionnaire for a 61% response rate. The 824 questionnaire responses were matched to the University's student

records. Separate tabulations indicated that 508 questionnaires (62%) were returned by students who were still enrolled at UCLA two years later (persisters) and 316 (38%) were returned by students who were no longer enrolled at UCLA (drop-outs).

Data from the questionnaire and the University's student record file (previous academic performance, financial aid status and demographic factors) were entered as independent variables into a step-wise multiple regression, using the UCLA GPA as the dependent variable. The analysis was terminated if p exceeded .001 or if the Beta weight for any independent variable was less than .10.

Results

The first independent variable to enter the step-wise multiple regression was the community college grade-point average (GPA), which explained 30% of the variance in the UCLA GPA. Other independent variables that entered the prediction equation in order were: the Writing Experiences Scale for community college courses, majoring in the Fine Arts, the amount of unmet financial need and the Experiences with Faculty Scale for the community colleges, F (5,560) = 69.3, $p < .001$, multiple R^2 = .38.

The higher level of academic performance of those students admitted to the College of Fine Arts might have been related to the additional screening of applicants by the faculty. Transfer students whose financial aid needs were met by the University had higher UCLA GPA's.

Table 3 shows the mean percentage of students, for all ten items on the Writing Experiences and Experiences with Faculty scales, who said that they had engaged in activities "often" or "very often" in lower division

and upper division courses. UCLA "native" students had higher scores on the Writing Experiences scale in their lower division courses than did community college tranfers (46% versus 30%). Transfer students who persisted after transferring to UCLA had higher quality of effort scores in community college courses than did the drop-outs (33% versus 19%).

INSERT TABLE 3 ABOUT HERE

The pattern of scores on the Experiences with Faculty Scale is the opposite of the pattern just described for the Writing Experiences Scale. Transfer students had higher scores on the Experiences with Faculty Scale than "native" students. For the drop-outs the amount of involvement with faculty at the community college was much higher than involvement with UCLA faculty (36% versus 15%).

Experiment 3

Method

Subjects. The Ss were 1,001 students who transferred to UCLA from one of nine Los Angeles area community colleges in the 1977-78 and 1978-79 academic years. A sub-group of 161 students, stratified by college and year of entry were selected for personal interviews. The remaining 840 Ss were sent a questionnaire.

Procedure. The questionnaire asked transfer students to describe their relationships with the four persons (excluding parents, spouses and children) with whom they currently were spending most of their time. A total of 502 questionnaires were returned for a response rate of 60%. These responses were merged with the University's student record file. There were 390 (78%)

questionnaires returned by students still enrolled at UCLA (persisters) and 112 (22%) returned by students who were no longer enrolled (drop-outs). Differences between persisters and drop-outs were studied through the use of chi square analysis.

Results

Consistent with the findings in Experiment 2, persisters were found to have more A's and fewer C's in high school courses (chi square (5) = 11.8, $p < .05$), community college courses (chi square (3) = 12.6, $p < .01$) and UCLA courses (chi square (5) = 76.1, $p < .001$). Persisters (80%) were more likely to have chosen the statement "My fellow students think of me as a serious student" than non-persisters (66%) when they were asked to make a forced choice between that statement and "My fellow students would not consider me to be one of the more serious minded students in the class" (chi square (1) = 9.1, $p < .01$).

In response to the question, "How well do you feel the community college prepared you for the academic experience at UCLA?" 18% said "very well," 52% said "fairly well," 24% said "poorly," and 6% said "not at all." The responses of persisters and non-persisters were not significantly different on this item.

Non-persisters (47% versus 32%) were more likely to live at home with their parents than persisters (chi square (5) = 10.8, $p < .05$). Also, non-persisters (52% versus 29%) were more likely to have worked more than 20 hours per week than persisters (chi square (5) = 25.9, $p < .001$). With respect to the social networks, the strongest finding for all four members of the network was that persisters (26% versus 8%) were more likely to have friends who were other UCLA students, while non-persisters were

more likely (20% versus 9%) to have made friends at work (Network 1: chi square (7) = 27.3, $p < .01$; Network 2: chi square (7) = 27.5, $p < .001$; Network 3: chi square (7) = 23.6, $p < .001$; Network 4: chi square (7) = 16.8, $p < .01$).

Discussion

Other research (Menke, Note 2) suggested that the academic performance of community college transfers was not comparable to "native" freshmen who become juniors. The results of Experiment 1 verified that conclusion. Community college transfers had lower grades in their upper division courses, were more likely to be on probation, had higher attrition rates and were less likely to graduate. Similar findings were reported for other campuses in the University of California System (Kissler, Note 5). That study found that "fewer students are transferring from the California Community Colleges to the University of California and the academic performance for those who do transfer is declining (Kissler, Notes 5 and 6)." Therefore, Experiments 2 and 3 were conducted to help explain why the academic performance of community college transfers is not equal to that of "native" freshmen who become juniors.

Differences in Students

Experiment 2 found that the community college GPA was the best predictor of the UCLA GPA for transfer students. Experiment 3 found that persisters had higher grades in high school, at the community college and at UCLA than drop-outs. Also persisters were more likely to characterize themselves as "serious students." Therefore, it seems reasonable to conclude that most of the difference in academic performance between community college transfers and "native" students can be attributed to differences

in ability and motivation.

The University of California selects its freshman entrants from the top 12-1/2 percent of the high school graduating class. Bird (1956) and Kissler (Note 5) both found that those individuals who were eligible for admission to UC from high school but chose to enroll in a community college did better than those who were ineligible from high school. However, Kissler (Note 5) found that even those community college transfers who were originally eligible from high school did not perform as well as native freshmen who had become juniors. Also, Menke (Note 2) found that even when UCLA graduates were matched on SAT scores, those students who transferred from a community college had lower grades than "native" students. Therefore, other factors than just differences in the students themselves must be contributing to the differences in academic performance.

Differences in the Type of Institutions

The difference in academic performance at the community college and the four-year institution is frequently attributed to "transfer shock." However, the use of the term "transfer shock" seems to be more of a label for the phenomenon than an explanation. Based upon data from five UC campuses, Kissler (Note 5) reported that the academic performance of community college transfers who had survived the first quarter of "transfer shock" was still not equal to that of "native" freshmen who had become juniors.

"Transfer shock" could be the result of several differences between the California Community Colleges and the University of California. For example, "transfer shock" may be the result of differences in the pace of the semester system adopted by most community colleges and the University of California's quarter system, differences in the size of the campuses

or differences in part-time versus full-time enrollment. Another important difference could be related to the amount of interaction students have with the faculty. The figures in Table 3 indicate that there was more student interaction with community college faculty than UCLA faculty. Data from the Pace and Friedlander study (Note 4) indicate that CSUC students have the same level of interaction with faculty that UCLA students have, and both have considerably less than community college students have with their faculty.

Therefore, the combination of these differences in types of institutions could help to explain the fact that upper division GPA's decline for community college and CSUC transfers, but increase for native freshmen who become juniors. However, these factors do not explain why there is a larger decline in the upper division GPA for community college transfers than CSUC transfers, given that both groups of transfer students enter with the same mean grade point average.

We feel that another important factor is related to differences in grading practices and the level of competition in the classroom.

Differences in Competition and Grading Policies

Russell and Perez (1980) indicated that there are differences in the level of textbooks used in the different segments of higher education in California. They also suggested that the decline in the level of academic preparation of students entering the community colleges has led to "superficial and cursory instruction" in the most difficult areas of the subject (p. 69).

Differences in grading policies may also be important. During the period in which the data for this study were collected, community college students

could withdraw from a class without penalty until the final week of the term. The importance of this withdrawal policy is reflected in a study by Friedlander (in press). He selected a random sample of transcripts for students at nine Los Angeles area community colleges and found that one-half of all students had never taken a science or mathematics course. More than 30% of those who did, withdrew from that first science or mathematics course before completing it. This results in a truncation of the lower end of the grading curve and may result in a tendency to give more B and C grades in community college courses. In recognition of this, the California Community Colleges have recently adopted a new withdrawal policy. Beginning in 1981, students will only be permitted to withdraw without penalty prior to the end of the 14th week of the semester.

Differences in Curriculum and Pedagogy

Another factor that may contribute to differences in articulation is the amount of writing required in lower division courses. The results of Experiment 2 indicate that community college transfers did not write as often in their lower division courses as UCLA freshmen and sophomores. Those transfer students who wrote more in community college courses received better grades at UCLA.

This difference in articulation is not restricted to courses that require writing. Menke (Note 2) found the biggest difference in academic performance between community college transfers and native students in the sciences. He hypothesized that the budgetary problems faced by the community colleges may limit their ability to provide equivalent instruction in science courses.

Approximately 30% of the students in Experiment 3 said that their community

college had prepared them "poorly" or "not at all" for UCLA. This may be at least partially the result of a tendency for students to attribute their difficulties to others in order to avoid feelings of guilt or shame for not working hard enough or for not having the ability to perform at a level equal to their expectations (Weiner, Russell and Lerman, 1979). However, the fact that both persisters and drop-outs rated the quality of preparation at such low levels suggests that there may be differences in curriculum and pedagogy. Several efforts are presently under way to bring together University and Community College faculty in several disciplines to discuss the articulation of the lower division curriculum.

Social Integration

Finally, there are factors that contribute to difficulties in the social integration of community college transfers. Community college transfers tend to be a few years older on the average. Our interviews with older transfer students indicate that they tend to feel alienated from other students. Members of the UCLA community are now discussing ways to provide better counseling and support services to older students.

Differences in employment patterns are probably even more important than age differences in attempting to explain the lack of involvement of many transfer students in the life of the University. Many students work full-time and attend community college classes on a part-time basis. Too frequently these students continue their job after transferring to UCLA, which requires full-time enrollment by most students. The extent to which a student is involved in the campus contributes to persistence (Astin, 1975). Not surprisingly, Experiment 3 found that persisters were more likely to have friends at UCLA and probably were more involved in campus life, while

drop-outs were more likely to have friends at work.

Recognizing this problem, UCLA has initiated a program to expand on-campus student employment opportunities. This program is based upon the assumption that if students must work it is better for them to work on campus where they are likely to meet friends who will get them involved in the broader aspects of university life.

Conclusion

The successful academic performance of community college transfers is the responsibility of the community colleges, the four-year institutions and the students. The community colleges have a responsibility for providing an equivalent, but not necessarily identical, lower division program that adequately prepares students for transferring to a four-year institution. The four-year institutions are responsible for finding the best ways to admit only those students with the potential to succeed and to provide the marginal students with the support they need to help them reach their full potential. Jointly the two segments have a responsibility to minimize "transfer shock."

The students also share a portion of the responsibility for their academic success. Even if there were no articulation difficulties between the segments, poor academic performance would still be likely if a student refused to go to class, would not take advantage of support services or failed to get involved in the broader aspects of the college experience. Such factors within the control of the student and other factors (e.g., health) beyond the control of the student or the two segments are probably responsible for the 62% of the variance in UCLA grades not explained by the independent variables studied in Experiment 2.

Several steps toward improving articulation and communication between the two segments have already been taken in California. The primary purpose of this study has been to provide additional information about specific factors that contribute to the differences in academic performance between community college transfers and "native" students. To the extent that this same phenomenon occurs in many other states, we trust that this study has also contributed to the general theoretical knowledge about articulation and has provided a research methodology that would be useful to other institutions.

Reference Notes

Knoell, D. M. and Medsker, L. L. "Factors Affecting Performance of Transfer Students from Two- to Four-Year Colleges: With Implications for Coordination and Articulation." Center for the Study of Higher Education, University of California, Berkeley, 1964.

Menke, D. H. "A Comparison of Transfer and Native Bachelor's Degree Recipients at UCLA, 1976-1978. Unpublished doctoral dissertation,

Pace, C. R. "Measuring the Quality of Student Effort." Laboratory for Research on Higher Education, University of California, Los Angeles, 1980.

Pace, C. R. and Friedlander, J. "College Student Experiences: Some Comparative Data." Laboratory for Research on Higher Education, University of California, Los Angeles, 1979.

Kissler, G. R. "Retention and Transfer." University of California, Office of the Academic Vice President, Berkeley, California, 1980.

Kissler, G. R. "Trends Affecting Undergraduate Education in the University of California." Presentation Board of Regents of the University of California, October, 1980.

References

Astin, A. W. Preventing Students from Dropping Out. San Francisco: Jossey-Bass, 1975

Barnes, J. A. "Networks and political process," in Social Networks in Urban Situations, J. C. Mitchell (Ed.). Manchester, England: Manchester University Press, 1969.

Bird, G. V. "Preparation for advanced study," in The Public Junior College: The Fifty-Fifth Yearbook of the Nation Society for the Study of Education, N.B. Henry (Ed.). Chicago, Illinois: The University of Chicago Press, 1956.

Bott, E. Family and Social Network. London: Tavistock, 1957.

Chickering, A. W. Commuting Versus Resident Students: Overcoming the Educational Inequities of Living Off Campus. San Francisco: Jossey-Bass, 1974.

Friedlander, J. "The initial science course: Its relationship to enrollment and success in later science courses." The Community Junior College Research Quarterly (in press).

Hills, J. R. "Transfer shock: The academic performance of the junior college transfer," Journal of Experimental Education, 1965, 33, 201-215.

Russell, A. A. and Perez, P. L. "Stopping the attrition of science transfer students." New Directions for Community Colleges, 8(3), 1980, 65-72.

Tinto, V. "Dropout from higher education: A theoretical synthesis of recent research." Review of Educational Research, 1975, 4, 89-125.

Weiner B., Russell, D. and Lerman, D. "The cognition-emotion process in achievement-related contexts." Journal of Personality and Social Psychology, 1979, 37(7), 1211-1220.

TABLE I
Attrition of UCLA Juniors
by Public Segment of Higher Education
in California Attended as Sophomores

Segment	Entering Fall of	N	Percent Who Leave UCLA Without Graduating After 1 year	2 years	3 years
California Community Colleges	1972	1,087	23	32	32
	1973	1,270	30	36	38
	1974	1,239	26	36	39
	1975	972	30	38	40
	1976	834	31	38	42
California State University and Colleges	1972	251	17	21	21
	1973	234	22	25	27
	1974	206	21	25	28
	1975	242	21	25	26
	1976	177	20	23	25
University of California	1972	2,312	12	14	14
	1973	1,654	15	18	19
	1974	1,787	13	16	17
	1975	1,808	13	16	16
	1976	1,864	13	16	18

TABLE II
Comparison of the Academic Performance of Transfers
from the California Community Colleges or
the California State University and Colleges with
University of California Freshmen Who Became Juniors at UCLA in 1976

Source	Lower Division GPA	N	Upper Division GPA	Percent on Probation	First Yr. Attrition in Acad. Difficulty	Percent Who Graduate
California Community Colleges	NA	23	2.18	66	61	30
	2.0-2.4	22	1.94	73	55	27
	2.4-2.8	188	2.13	82	36	37
	2.8-3.2	242	2.45	62	25	53
	3.2-3.6	221	2.84	31	11	62
	3.6-4.0	138	3.22	19	7	71
	Total	834	2.59	51	22	53
California State University and Colleges	NA	4	2.08	75	50	25
	2.0-2.4	7	2.37	86	14	57
	2.4-2.8	44	2.36	64	25	55
	2.8-3.2	56	2.75	45	9	71
	3.2-3.6	47	3.05	23	6	87
	3.6-4.0	19	3.35	5	11	84
	Total	177	2.77	42	14	71
University of California	NA	36	2.56	39	42	36
	2.0-2.4	262	2.52	60	12	68
	2.4-2.8	505	2.78	43	8	75
	2.8-3.2	491	3.06	23	4	82
	3.2-3.6	380	3.40	11	3	88
	3.6-4.0	190	3.67	7	1	91
	Total	1,864	3.04	30	6	80

ERIC® CLEARINGHOUSE FOR JUNIOR COLLEGES
EE 36

UNIVERSITY OF CALIFORNIA
96 POWELL LIBRARY BUILDING
LOS ANGELES, CALIFORNIA 90024

JUL 31 1981